

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES 1 9		
2. AMENDMENT/MODIFICATION NO. 0001		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (if applicable)	
6. ISSUED BY CODE				7. ADMINISTERED BY (If other than item 6) CODE			
U.S. Department of Energy Oakland Operations Office 1301 Clay Street, Room 700N Oakland, CA 94612-5208							
8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and Zip Code) All Prospective Offerors				9A. AMENDMENT OF SOLICITATION NO. DE-RP03-00SF22042			
				9B. DATED (SEE ITEM 11) May 19, 2000			
				10A. MODIFICATION OF CONTRACT/ORDER NO.			
				10B. DATED (SEE ITEM 13)			
CODE		FACILITY CODE					

11. THIS ITEM APPLIES TO AMENDMENTS OF SOLICITATIONS

• The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers **9** is extended, • is not extended. Offerors must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning one (1) copy of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or, (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(✓)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT/ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor • is not, **9** is required to sign this document and return _____ copies to this issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Continued on Page 2

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Aundra Richards Contracting Officer	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
_____ (Signature of person authorized to sign)		BY Original signed by Aundra Richards 6/7/00 (Signature of Contracting officer)	

The purpose of Amendment 0001 to Request for Proposal (RFP) DE-RP03-99SF22042 is summarized as follows:

- (1) Provides questions received from Prospective Offerors and DOE responses to questions. The questions and answers provided herein supercedes in their entirety, the questions and answers posted on the DOE/OAK homepage on June 1, 2000.
- (2) Revises Clause L.043, PROPOSAL PREPARATION INSTRUCTIONS - VOLUME II, TECHNICAL PROPOSAL.
- (3) Adds Clause L.081, FORMAT - VOLUME I TECHNICAL PROPOSAL, PHASE I.
- (4) Adds Clause L.082, FACILITIES CAPITAL COST OF MONEY (OCT 1997).
- (5) Revises Clause M.002, QUALIFICATION CRITERIA - PHASE I.
- (6) Modifies Section I, Clause List 304 - Phase II/III.
- (7) Revises the Executive Summary dated May 19, 2000.

All Amendments issued to the RFP must be acknowledged in Block 14 of Standard Form 30 at the time your proposal offer is submitted to our office. RFP No. DE-RP03-00SF22042 is amended as follows:

- (1) Questions and Answers:

Following are questions received from Prospective Offerors concerning RFP DE-RP03-00SF22042 "System Integration of a Stirling Radioisotope Power System" and DOE's responses to those questions:

Q1. *Re: Executive Summary, page 2 line 2. Is this a typo? Should the words "Phase II/II is" be read as "Phase II/III"?*

A1. The words "Phase II/II", on page 2, line 2, of the Executive Summary – Request for Proposals No. DE-RP03-00SF22042, System Integration of a Stirling Radioisotope Power System, is corrected to read "Phase II/III". The Executive Summary has been revised and is included as an attachment to Amendment No. 0001.

- Q2. *The Executive Summary paragraph 3 [page 2] implies that only a Phase I proposal is required at this time in response to the RFP. Section L.041 implies that both Phase I and Phase II/III proposals are required at this time. Which interpretation is correct?*
- A2. Offerors responding to this RFP should prepare a proposal for the Phase I effort as set forth in Section L, paragraph L.043 under the heading Phase I Proposal. The Phase II/III proposal preparation instructions as set forth in Section L, paragraph L.043 under the heading Phase II/III Proposal will be prepared as part of the Phase I effort after the contract(s) for Phase I is/are awarded.
- Q3. *With regard [to] the qualification statement in Volume 1, the RFP references section M, clause M002 which talks about qualification requirements if proposing other than the STC engine. If the approach is to utilize the STC, is that all that needs to be stated in the qualification statement?*
- A3. If the offeror's approach is to utilize the Stirling Technology Company (STC) engine design, this is all the offeror needs to state in the qualification statement.
- Q4. *Section L, Instructions, Conditions and Notices to Offerors, does not provide a page limit requirement, however the executive summary to the RFP on page 2 under "Purpose of Solicitation" states, "...the Technical Proposal for Phase one should not exceed 25 pages in length. Is the executive summary invoking a page limit requirement? Are other (non-technical) sections of the proposal subject to page limitations?*
- A4. The Executive Summary invokes a page limit of 25 pages for the Phase I, Volume II, Technical Proposal. No page limit is invoked for other non-technical sections of the Phase I proposal (i.e. Volume I, Offer and Other Documents, and Volume IV, Cost Proposal). Paragraph L.041(d) of the RFP has been revised to specify that the number of pages for Volume II, Technical Proposal, Phase I is limited to 25 pages (see Item No. 2 of Amendment No. 0001).
- Q5. *Section L.045 (a) (6), Preparation Instructions - Cost Proposal states, "Offerors may be required to certify in accordance with Public Law 87-653." Is the Contracting Officer requiring certified cost and pricing*

data, or is the Phase I procurement considered to fall under the exemption contained in FAR 15.403-1(b), i.e. adequate price competition? In other words, since Section L.012 states that multiple awards are anticipated, does the Contracting Officer consider that the prices will be based on adequate price competition pursuant to FAR 15.403 (c)(1)?

- A5. The Phase I procurement is considered to fall under the exemption contained in FAR 15.403-1(b)(1), i.e. adequate price competition.
- Q6. *Section L does not give specific limits for formatting, font size, etc. Are there any specific guidelines for proposal formatting (other than the stated organization)?*
- A6. Section L.081 entitled Format-Volume I, Technical Proposal has been added to the RFP.
- Q7. *The executive summary anticipates the need for "L" security clearances. Will the "L" clearances be required for Phase 1?*
- A7. "L" clearances are not required for the Phase I effort. "L" clearances will be required for Phases II and III.
- Q8. *Given the reliability concerns associated with designs provided by Stirling Technology Co. on other contract deliverable hardware, will the DOE consider alternative designs for this RFP that do not meet some or all of the qualification requirements specified in M.002, Part 1?"*
- A8. The 55 watt-electric Stirling Technology Demonstration Convertor (TDC), developed under a DOE contract, has successfully demonstrated reliable operations under a variety of test conditions. This TDC has been selected by DOE as the baseline convertor to be used in offeror's response to the Statement of Work for system integration of a Stirling Radioisotope Power System. DOE will consider alternative Stirling technology designs other than the Stirling Technology Company (STC) engine only if those alternative designs meet all of the requirements set forth under Clause M.002, "Qualification Criteria - Phase I". Please review the performance areas (a) through (d) listed under Clause M.002, "Qualification Criteria – Phase I" and the associated references (1) through (6). References (1)

though (6) are available either electronically or as hard copy. Requests for hard copies should be directed to the attention of Wayne Bryan, Contract Specialist, at 1301 Clay Street, Room 700N, Oakland, Ca 94612 or wayne.bryan@oak.doe.gov.

- Q9. *In Section G, Page 17, clause G.06 – Payment Schedule – Phase 1 indicates three milestone payments with a breakout of 10%, 10% and 80%. However, under Section 1 - Contract Clauses, page 6, FAR 52.232-16 - Progress Payments is invoked. Also FAR 52.232-2 – Payments under Fixed Price Research and Development Contracts is indicated as applying. Please clarify which method of payment will be utilized under Phase I and the rationale for the percentage breakouts regarding payments.*
- A9. Clause FAR 52.232-16 will not apply. The payment schedule is based on the fact that the Phase I Contractors are unknown at this time and DOE has no way of determining past history in contract performance regarding the delivery of contract deliverables.
- Q10. *Section 1 – Contract Clauses, Phase II/III page 7, FAR 52.243-6 “Change Order Accounting” increases costs to the government and has historically not been applied to existing DOE contracts. We recommend deleting this clause to effect cost savings.*
- A10. Clause FAR 52.243-6 states that the Contracting Officer may require Change Order accounting. Since the Phase I Contractors are unknown at this time, DOE has no way of determining past history in contract performance regarding a contractor’s response to Change Orders.
- Q11. *Section 1 – Contract Clauses, Phase I and Phase II/II, page 2 and 2 respectively invoke FAR 52.215-17 “Waiver of Facilities Capital Cost of Money”. However, Attachment X “Instructions for Submitting Cost/Price Proposals when Cost or Pricing Data are Required”, page 11 and 12 provide instructions for Contract Facilities Capital and Cost of Money information. We request FAR 52.215-16 be inserted into this RFP.*
- A11. Clause FAR 52.215-17 will not apply and clause FAR 52.215-16 will be added to the RFP.

- Q12. *Per Attachment 1 – Statement of Work – during Phase 1, interfaces with STC will be coordinated through the Department of Energy. Guidelines need to be provided for preparation of the Phase II/III proposal with regard to STC.*
- A12. DOE will provide guidance during the Phase I effort.
- Q13. *Section 1 Contract Clauses – Phase II/III, page 6 – Limitation of Funds clause FAR 52-232-22 applies, we request application of Limitation of Cost FAR 52-232-20.*
- A13. Phase II/III will be incrementally funded. Clause FAR 52.232-22 applies.
- Q14. *The executive summary notes that the technical proposal for Phase 1 requires only information as to capability to be a systems contractor and information on past performance and as a result limits the document to 25 pages. This definition of content is inconsistent with L.043, which specifies additional sections addressing design approach and technical approach and with M.004, which defines technical evaluation criteria for both design and technical approach. We are assuming L.043 and M.004 apply but does the 25 page limit apply?*
- A14. See A1 and A4 above.
- Q15. *If DOE believes it will receive adequate price competition, why is certified pricing data required?*
- A15. See A5 above.
- Q16. *Will DOE continue to fund the program for post proposal activities leading up to contract award (audits, fact finding questions, BAFO activities)?*
- A16. No.

- (2) Section L INSTRUCTIONS, CONDITIONS AND NOTICES TO OFFERORS, Clause L.043, PROPOSAL PREPARATION INSTRUCTIONS - VOLUME II, TECHNICAL PROPOSAL, paragraph (d), is deleted in its entirety and replaced with the following:

“d) Technical Discussion. This section shall contain the major portion of the Technical Proposal. The Technical Proposal shall be limited to a maximum of 25 pages. It should clearly address each of the Technical Evaluation Criteria as set forth in Section M, including the listed sub-criteria, and shall be divided into sections corresponding to the order of the Technical Evaluation Criteria. Each criterion must be fully responded to, and the offeror's responses should be presented in as much detail as practical. Simply stating that the offeror understands and will provide the requirements is not adequate. Similarly, phrases such as "standard procedures will be employed" or "well-known technique will be used" are also inadequate. Each area of the Technical Discussion section of the offeror's proposal must be clearly marked to indicate the specific criterion being addressed. Additional guidance is provided below for each Technical Criterion.”

- (3) Clause L.081, FORMAT - VOLUME I TECHNICAL PROPOSAL, PHASE I, is added to the RFP as follows:

“L.081 FORMAT - VOLUME I TECHNICAL PROPOSAL, PHASE I

The technical proposal for Phase I shall be submitted on 8 ½ x 11 paper with 12 pt. pitch and one inch margins.”

- (4) Clause L.082, FACILITIES CAPITAL COST OF MONEY (OCT 1997), is added to the RFP as follows:

“L.082 FACILITIES CAPITAL COST OF MONEY (OCT 1997)

- (a) Facilities capital cost of money will be an allowable cost under the contemplated contract, if the criteria for allowability in subparagraph 31.205.10(a)(2) of the Federal Acquisition Regulation are met. One of the allowability criteria requires the prospective contractor to propose facilities capital cost of money in its offer.
- (b) If the prospective Contractor does not propose this cost, the resulting contract will include the clause Waiver of Facilities Capital Cost of Money.”

- (5) Clause M.002, QUALIFICATION CRITERIA - PHASE I, is deleted in its entirety and replaced with the following:

“M.002 QUALIFICATION CRITERIA - PHASE I

The proposal must clearly demonstrate that the offeror meets each and every one of the below Qualification Criteria in order to be evaluated in accordance with the Evaluation Criteria.

Qualification Criteria

1. If the Offeror proposes an alternative Stirling technology to the Stirling Technology Company convertor specified in the Statement of Work (a 55 watt-electric Stirling Technology Company convertor developed by the Stirling Technology Co) then the Offeror must provide documentation that the proposed alternative Stirling technology is at an equivalent technology readiness level in the following performance areas:
 - a) successfully passed flight qualification vibration tests [Ref. (1), (6)];
 - b) demonstrated continuous operation of at least two years without failure [Ref. (4), (5)];
 - c) demonstrated performance of at least 20% conversion efficiency [Ref. (4), (5)];
 - d) demonstrate performance characteristics of organic materials in an ionizing radiation environment [Ref. (2)];

References:

- (1) Test Report SDL-TR 99-37, “Technology Demonstrator Convertor (TDC) Stirling Engine. Prototype Unit. Vibration Test Report.” Glenn Research Center. January 24, 2000.
- (2) “Final Report on Organic Materials Ionizing Radiation Susceptibility for 55 W_e Stirling Convertor.” Glenn Research Center. April 12, 2000.
- (3) “Evaluation of Stirling Engine Technology, LMSP-7268.” Lockheed Martin Astronautics Operations, Space Power Programs. March 31, 2000.

- (4) "Technology Demonstration of a Free-Piston Stirling Advanced Radioisotope Space Power System." Proceedings from Space Technology and Applications International Forum (STAIF) – 99. January 31, 1999 through February 4, 1999.
- (5) "Technology Development for a Stirling Radioisotope Power System for Deep Space Missions." 1999-01-2454. NASA Glenn Research Center. Stirling Technology Company. January 1999.
- (6) "Vibration Testing of an Operational Stirling Converter" NASA Glenn Research Center.

Note: References (1) through (6) provide examples of the types of data collection and testing performed on the Stirling Technology Company converter. The references can be found at <http://www.oak.doe.gov>.

- (6) Section I, Clause List 304 - Phase II/III is modified as follows:
 - a. Clause FAR 52.232-16, PROGRESS PAYMENT, is not applicable.
 - b. Clause FAR 52-215.17, WAIVER OF FACILITIES CAPITAL COST OF MONEY, is not applicable.
- (7) Executive Summary, dated May 19, 2000, is deleted and replaced with the attached Executive Summary, dated June 7, 2000.

End of Amendment No. 0001